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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|----------------|----------------------|-------------------------|------------------|
| 09/960,517 | 09/24/2001 | Hitoshi Aoki | 900-400 | 7216 |
| 7: | 590 12/18/2002 | | | |
| NIXON & VANDERHYE P.C. | | | EXAMINER | |
| 8th Floor 1100 North Glebe Rd. | | | THOMAS, TONIAE M | |
| Arlington, VA 22201-4714 | | | ART UNIT | PAPER NUMBER |
| | | | 2822 | 10 |
| | | | DATE MAILED: 12/18/2002 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ~ · | Application No. | Applicant(s) | | | |
|--|--------------------------------------|--|--|--|--|
| | 09/960,517 | AOKI, HITOSHI | | | |
| Office Action Summary | Examin r | Art Unit | | | |
| | Toniae M. Thomas | 2822 | | | |
| Th MAILING DATE of this communication app | ars on the cover sh et with the c | orrespondenc address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 30 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | |
| 1) Responsive to communication(s) filed on 04 C | October 2002 . | | | | |
| 2a)☐ This action is FINAL . 2b)⊠ Thi | s action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-12 and 18-21 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6) Claim(s) is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | on and/or alaction requirement | | | | |
| 8)⊠ Claim(s) <u>1-12 and 18-21</u> are subject to restriction and/or election requirement. Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accep | ted or b)□ objected to by the Exa | miner. | | | |
| Applicant may not request that any objection to the | e drawing(s) be held in abeyance. Se | ee 37 CFR 1.85(a). | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a)⊠ All b) Some * c) None of: | | | | | |
| 1.⊠ Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | r (PTO-413) Paper No(s) Patent Application (PTO-152) | | | |

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DETAILED ACTION

1. This action is an official response to the amendment received on 04 October 2002. The amendment, which cancelled non-elected claims 13-17 and added claims 18-21, necessitated the following restriction requirement.

Election/Restrictions

- 2. This application contains claims directed to the following patentably distinct species of the claimed invention:
- i. the high concentration impurity region is laterally offset from and laterally spaced from the low concentration impurity region in the at least one impurity region the embodiment of claims 1-12, 18);
- ii a portion of the low concentration impurity region is located under at least a portion of the high concentration impurity region (the embodiment of claim 19);
- iii. the low concentration impurity region and/or the intermediate concentration impurity region is located between a portion of the substrate, in which neither of the impurity regions are defined, and the high concentration impurity region, so that the high concentration impurity region is not in direct contact with the portion of the substrate in which neither of the impurity regions are defined the embodiment of claim 21).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 20 is generic.

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- 3. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- 4. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species (MPEP § 809.02(a)).
- 5. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toniae M. Thomas whose telephone number is (703) 305-7646. The examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (703) 308-4905. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JMJ

December 15, 2002

AMIR ZARABIAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800